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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/607,782 06/30/00 PARKER

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EXAMINER

MM91/0927

JAN CAROL LITTLE  
BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP  
SEVENTH FLOOR  
12400 WILSHIRE BOULEVARD  
LOS ANGELES CA 90025-1026

TRAN.T

ART UNIT

PAPER NUMBER

2816

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

<b>Office Action Summary</b>	Application No. 09/607,782	Applicant(s) PARKER ET AL.	
	Examiner Toan Tran	Art Unit 2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.  
     4a) Of the above claim(s) 10-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-9 and 21-24 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____   |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3</u> . | 6) <input type="checkbox"/> Other:  |

***Election/Restrictions***

1. Claims 21-22 and 24 are generic to a plurality of disclosed patentably distinct species. The Generic Group of claims is drawn to a circuit comprising an amplifier (202 in Fig. 2, 402 in Fig. 4, and 502 in Fig. 5) and a gain stage (204 in Fig. 2, 404 in Fig. 4, and 504 in Fig. 5). There are three species:

Group 1: Claims 1-9 are drawn to Fig. 2 with gain stage (204, called "amplifier" in claim 1) is a scaled replica of the first branch (205).

Group 2: Claims 10-15 are drawn to Fig. 4 with the gain stage (404, called "amplifier" in claim 10) has a transistor (422) with the gate connected to a first voltage (232).

Group 3: Claims 16-20 are drawn to Fig. 5 with the gain stage (504, called "amplifier" in claim 16) being a differential amplifier.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2. During a telephone conversation with Jan Carol Little on September 18, 2001 a provisional election was made without traverse to prosecute the invention of Group I,

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claims 1-9 and 23 and Generic Group claims 21-22 and 24. Affirmation of this election must be made by applicant in replying to this Office action. Claims 10-20 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

#### **DETAIL ACTION**

##### ***Claim Objections***

4. Claims 1-9 are objected to because of the following informalities: In claim 1, line 8, "the post amplifier" does not have proper antecedent basis; it appears that the word "post" should be deleted. Other claims are objected to because they depend from claim 1. Appropriate correction is required.

##### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 2-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 2 is indefinite because in the preamble, it recites "further comprising" as though the elements recited in claim 2 were additional to those in claim 1. However, it is apparent in Fig. 1 that the elements in claim 2 are the details of the elements recited in claim 1.

Claim 3 is indefinite because in line 5, it is not clear where the "output node potential" is located in the circuit.

Claims 4-6 are indefinite because it is not clear where the "trip point" are located in the circuit.

Claim 7 is indefinite because there is no proper antecedent basis for "the output node potential". Furthermore, it is not clear where "the output node potential" is located in the circuit.

Other claims are rejected because they depend from at least one indefinite claim.

### ***Drawings***

7. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

8. The drawings are objected to because the specification discloses a circuit for sensing the programmable states of fuses; however, the fuses or the word "fuse" are not shown in the drawings. Furthermore, the word "enable signal" should also be labeled in the drawings to help examiners with their search if and when the application is patented. Correction is required.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 21-22 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Prior Art Fig. 1 in the present application.

Prior Art Fig. 1 discloses an apparatus comprising: an amplifier (102) with a sense branch (105) and a reference branch (107) connected in a current mirror configuration, having an output node (120); a gain stage (104) coupled to the amplifier, having a trip point (150) to track a potential on the output node; and first and second voltages (132 and 130) each coupled to the amplifier and gain stage.

11. Claims 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Armstrong, II (US Patent 5,418,487).

Armstrong discloses in Fig. 3 an apparatus comprising: an amplifier (48, 44, 52, 36, 40) with a sense branch (44, 36, 40) and a reference branch (48, 52) connected in a current mirror configuration, having an output node (32); a gain stage (54, 58) coupled to the amplifier, having a trip point (56) to track a potential on the output node; and first and second voltages (VCC and ground) each coupled to the amplifier and gain stage; wherein the gain stage (54, 58) is a scaled replica of the sense or reference branch (the gain stage 54-58 and the reference branch 48-52 each have 2 transistors).

***Allowable Subject Matter***

12. Claims 1-9 would be allowable if rewritten or amended to overcome the objection to claim 1 and rejection(s) under 35 U.S.C. 112, second paragraph for claims 2-9.

**Reasons:** Claims 1-9 would be allowable because the prior art does not teach or suggest a circuit (Fig. 2) comprising: a first circuit branch (205) and second circuit branch (207) connected in a current mirror configuration; and an amplifier (204) coupled to the second circuit branch comprising a scaled replica of the first branch (resistance 224 and transistors 226 and 222 are scaled replica of resistance 214 and transistors 210 and 206), and an output node (250); and an enable node (260) coupled to the first and second branches and the amplifier to indicate at the output node whether the first or second branch is programmed or un-programmed.

***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References are cited as of interest because they show some fuse sensing circuits analogous to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan Tran whose telephone number is (703) 308-4866. The examiner can normally be reached on 8:30am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on (703) 308-4876. The fax phone numbers for the organization where this application or proceeding is assigned are (703)

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308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Toan Tran  
Primary Examiner  
Art Unit 2816

TT  
September 21, 2001